



FLORENCE COPPER INC.

1575 W. Hunt Highway, Florence, Arizona 85132 USA

florencecopper.com

October 22, 2021

Mr. David Albright
Manager, Groundwater Protection Section
USEPA Region 9 (WTR-4-2)
75 Hawthorne St
San Francisco, CA 94105

Subject: Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1
Monthly Update for AL/AQL Exceedances at Supplemental Monitoring Well M59-O

Dear Mr. Albright:

Florence Copper is providing this monthly update of supplemental monitoring well M59-O alert level (AL) and/or Aquifer Quality Limit (AQL) exceedances under Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1 (Permit).

Florence Copper has been voluntarily monitoring M59-O monthly for the parameters listed in Table 1 (see attached), and previously submitted a monthly report on September 23, 2021. Table 1 has been updated to include the most recent laboratory results from the monthly sample collected on September 20, 2021 and received on October 11, 2021. Concentrations of most of the analytes in Table 1 have decreased since the last monthly sample. The October monthly sample was collected on October 19th, and the results are pending.

Rinsing activities continue at the PTF wellfield. Injection into well I-02 was discontinued in August and September to aid rinsing efforts on the east side of the wellfield. In early October, well I-02 began temporarily operating as a recovery well. Also during October, recovery rates in the wellfield were approximately two times greater than the injection rates. Hydraulic gradients were maintained throughout the month.

Florence Copper will continue monthly sampling of supplemental monitoring well M59-O for parameters which exceeded the ALs and AQLs and will report these results monthly to EPA until all concentrations are below the ALs and AQLs.

Please feel free to contact me should you have any questions or comments.

Sincerely,
Florence Copper, Inc.



Brent Berg
General Manager

Cc: Nancy Rumrill, EPA Region 9
Maribeth Greenslade, ADEQ

Table 1. M59-O Monthly Sampling Results

Parameter	AL	AQL	12/28/20	1/18/21	2/22/21	3/23/21	4/14/21	5/19/21	6/01/21	7/19/2021	8/24/21	9/20/21
Magnesium (mg/L)	23	--	57.2	63.1	26.5	19.1	19.8	65.6	59.8	70	59	59
Sulfate (mg/L)	202	--	865	960	383	228	249	999	850	1200	1100	990
Total dissolved solids (TDS) (mg/L)	854	--	1,860	1800	970	762	780	2010	1900	2300	2100	2000
Total Uranium (mg/L)	0.0052	--	0.037	0.038	0.0088	0.003	0.0038	0.0096	0.0117	0.0187	0.0326	0.024
Adjusted gross alpha (pCi/L)	15.8	15.8	73.5 ± 3.7	35.4 ± 2.5	17.9±1.4	18.8±1.5	18.1±1.2	49.1±2.1	57.3±2.9	29.4±3.2	31.3±3.7	24.4±3.4
Radium 226+228 (pCi/L)	6.9	6.9	19.8 ± 0.8	22.0 ±0.8	6.2±0.5	7.0±0.6	10.9±0.7	18.0±0.8	13.6±0.7	15.4±0.7	13.7±0.6	10.3±0.6
Gross beta (pCi/L)	16	16	43.2±2.7	52.7±3.0	NA	NA	19.6±1.9	52.1 ± 3.3	36.9±2.9	41.6±3.2	36.8±3.1	38.6±3.1

BOLD values are exceedances of AL and/or AQL

NA: not analyzed